

Claims:

1. A conference bridge suitable for managing a conference between a plurality of media
signal sources generating media data packets conveying encoded media information
and encoding type information, said conference bridge comprising:
- a) an input for receiving a plurality of link messages for joining a conference, each
link message being associated with a respective media signal source of the
plurality of media signal sources, each link message including a data element from
which can be derived at least one encoding type that the associated media signal
source can support during decoding of encoded media information;
- b) a processing unit coupled to said input, said processing unit being operative for:
- i. processing the data elements in the plurality of link messages to derive:
- (a) a first encoding type supported by each media signal source of the
plurality of media signal sources;
- (b) a second encoding type different from the first encoding type supported by
at least two media signal sources from the plurality of media signal sources
and unsupported by at least one of the media signal sources from the
plurality of media signal sources;
- ii. generating a link message reply signal for transmission to each media
signal source of the plurality of media signal sources, the link message reply
signals for transmission to the at least two media signal sources supporting the
second encoding type conveying the first encoding type and the second
encoding type, the link message reply signals for transmission to the media
signal sources other than the at least two media signals sources conveying at
least the first encoding type;
- c) an output coupled to said processing unit for releasing the link message reply
signals for transmission to the plurality of media signal sources.
2. A conference bridge as described in claim 1, wherein said processing unit includes a
memory element, said memory element suitable for storing a plurality of records, each

record being associated with a media signal source part of the conference, each record declaring at least one encoding type supported by the associated media signal source.

3. A conference bridge as defined in claim 2, wherein said processing unit is responsive to a link message from a media signal source for which no record is present in said memory element to generate a record in said memory element declaring at least one encoding type that the media signal source associated with the link message supports.
4. A conference bridge as described in claim 1, wherein said processing unit is responsive to a link message received from a new media signal source subsequent to the deriving of the first and second encoding types for:
 - a) processing the data elements from the plurality of the media signal sources and the new media signal source to derive:
 - i. a new first encoding type supported by each media signal source of the plurality of the media signal sources and the new media signal source, the plurality of the media signal sources and the new media signal source forming an augmented set of media signal sources;
 - ii. a new second encoding type different from the new first encoding type supported by at least two media signal sources from the augmented set of media signal sources and unsupported by at least one of the media signal sources from the augmented set of media signal sources;
 - b) generating a link message reply signal for transmission to each media signal source of the augmented set of media signal sources, the link message reply signals for transmission to the at least two media signal sources from the augmented set of media signal sources supporting the new second encoding type conveying the new first encoding type and the new second encoding type, the link message reply signals for transmission to the media signal sources from the augmented set of media signal sources other than the at least two media signals sources conveying at least the new first encoding type.

5. A conference bridge as described in claim 2, wherein said input is further operative for receiving an exit message for exiting a conference, the exit message being associated with a given media signal source, said processing unit being responsive to an exit message received from a media signal source subsequent to the deriving of the first and second encoding types for:

- i. processing the exit message to identify in said memory element a record associated with said given media signal source;
- ii. removing the record associated with said given media signal source identified in i. from the plurality of records in said memory element thereby forming a reduced group of records, the reduced group of records being associated with a reduced group of media signal sources;
- iii. processing the reduced group of records to derive:
 - (a) a new first encoding type supported by each media signal source of the reduced group of media signal sources;
 - (b) a new second encoding type different from the first encoding type supported by at least two media signal sources from the reduced group of media signal sources and unsupported by at least one of the media signal sources from the reduced group of media signal sources;
- iv. generating a link message reply signal for transmission to each media signal source of the reduced group of media signal sources, the link message reply signals for transmission to the at least two media signal sources from the reduced group of media signal sources supporting the new second encoding type conveying the new first encoding type and the new second encoding type, the link message reply signals for transmission to the media signal sources from the reduced group of media signal sources other than the at least two media signals sources conveying at least the new first encoding type.

6. A conference bridge as described in claim 1, wherein said processing unit is operative for:

- a) deriving a set of second encoding types, each second encoding type in said set of encoding types being supported by an associated subset of media signal sources,

each subset of media signal sources including at least two media signal sources from the plurality of media signal sources and excluding at least one of the media signal sources from the plurality of media signal sources; and

- 5 b) generating a link message reply signal for transmission to each media signal source of the plurality of media signal sources, the link message reply signals released to each subset of media signal sources conveying the first encoding type and the second encoding type associated with the subset of media signal sources, the link message reply signals for transmission to the media signal sources other than the media signal sources in the subsets of media signal sources conveying at least the first encoding type.
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7. A conference bridge as described in claim 1, wherein said processing unit is operative for:

- 15 a) deriving a set of second encoding types supported by at least two media signal sources from the plurality of media signal sources and unsupported by at least one of the media signal sources from the plurality of media signal sources;
- b) processing the set of second encoding types derived in a) to select at least one second encoding type on the basis of performance characteristics associated with the second encoding types in the set of second encoding types;
- 20 c) generating a link message reply signal for transmission to each media signal source of the plurality of media signal sources, the link message reply signals for transmission to the at least two media signal sources supporting the second encoding type selected in b) conveying the first encoding type and the second encoding type selected in b), the link message reply signals for transmission to the
- 25 media signal sources other than the at least two media signals sources conveying at least the first encoding type.

8. A conference bridge as described in claim 1, wherein said processing unit is operative for:

- 30 a) deriving a set of first encoding types supported by each media signal source of the plurality of media signal sources;

b) generating a link message reply signal for transmission to each media signal source of the plurality of media signal sources, the link message reply signals for transmission to the at least two media signal sources supporting the second encoding type conveying the set of first encoding types and the second encoding type, the link message reply signals for transmission to the media signal sources other than the at least two media signals sources conveying at least the set of first encoding types .

9. A conference bridge as described in claim 1, wherein said processing unit is operative for:

- a) deriving a set of first encoding types supported by each media signal source of the plurality of media signal sources;
- b) processing the set of first encoding types derived in a) to select at least one encoding type on the basis of performance characteristics associated with the encoding types in the set of first encoding types;
- c) generating a link message reply signal for transmission to each media signal source of the plurality of media signal sources, the link message reply signals for transmission to the at least two media signal sources supporting the second encoding type conveying the at least one first encoding type selected in b) and the second encoding type, the link message reply signals for transmission to the media signal sources other than the at least two media signals sources conveying the at least one first encoding type selected in b).

10. A method suitable for managing a conference between a plurality of media signal sources generating media data packets conveying encoded media information and encoding type information, said method comprising:

- a) receiving a plurality of link messages for joining a conference, each link message being associated with a respective media signal source of the plurality of media signal sources, each link message including a data element from which can be derived at least one encoding type that the associated media signal source can support during decoding of encoded media information;

- 5 b) processing the data elements in the plurality of link messages to derive:
- i. a first encoding type supported by each media signal source of the plurality of media signal sources;
 - ii. a second encoding type different from the first encoding type supported by at least two media signal sources from the plurality of media signal sources and unsupported by at least one of the media signal sources from the plurality of media signal sources;
- 10 c) generating a link message reply signal for transmission to each media signal source of the plurality of media signal sources, the link message reply signals for transmission to the at least two media signal sources supporting the second encoding type conveying the first encoding type and the second encoding type, the link message reply signals for transmission to the media signal sources other than the at least two media signals sources conveying at least the first encoding type;
- 15 d) releasing the link message reply signals for transmission to the plurality of media signal sources.
- 20 11. A method as described in claim 10, wherein said method further comprises providing a memory element suitable for storing a plurality of records, each record being associated with a media signal source part of the conference, each record declaring at least one encoding type supported by the associated media signal source.
- 25 12. A method as defined in claim 11, wherein said method comprises:
- a) generating a record in response to a link message from a media signal source for which no record is present in said memory element, the record declaring at least one encoding type that the media signal source associated with the link message supports;
 - b) storing the record in said memory element .
- 30 13. A method as described in claim 10, wherein said method comprises:
- a) receiving a link message from a new media signal source subsequent to the deriving of the first and second encoding types;

b) processing the data elements from the plurality of the media signal sources and the new media signal source to derive:

i. a new first encoding type supported by each media signal source of the plurality of the media signal sources and the new media signal source, the plurality of the media signal sources and the new media signal source forming an augmented set of media signal sources;

ii. a new second encoding type different from the new first encoding type supported by at least two media signal sources from the augmented set of media signal sources and unsupported by at least one of the media signal sources from the augmented set of media signal sources;

c) generating a link message reply signal for transmission to each media signal source of the augmented set of media signal sources, the link message reply signals for transmission to the at least two media signal sources from the augmented set of media signal sources supporting the new second encoding type conveying the new first encoding type and the new second encoding type, the link message reply signals for transmission to the media signal sources from the augmented set of media signal sources other than the at least two media signals sources conveying at least the new first encoding type;

d) releasing the link message reply signals for transmission to the media signal sources in the augmented set of media signal sources.

14. A method as described in claim 11, wherein said method further comprises:

a) receiving an exit message for exiting a conference, the exit message being associated with a given media signal source, said exit message being received subsequent to the deriving of the first and second encoding types;

b) processing the exit message to identify in the memory element a record associated with the given media signal source;

c) removing the record associated with the given media signal source identified in b) from the plurality of records in the memory element thereby forming a reduced group of records, the reduced group of records being associated with a reduced group of media signal sources;

- d) processing the reduced group of records in the memory element to derive:
- i. a new first encoding type supported by each media signal source of the reduced group of media signal sources;
 - ii. a new second encoding type different from the first new encoding type supported by at least two media signal sources from the reduced group of media signal sources and unsupported by at least one of the media signal sources from the reduced group of media signal sources;
- e) generating a link message reply signal for transmission to each media signal source of the reduced group of media signal sources, the link message reply signals for transmission to the at least two media signal sources from the reduced group of media signal sources supporting the new second encoding type conveying the new first encoding type and the new second encoding type, the link message reply signals for transmission to the media signal sources from the reduced group of media signal sources other than the at least two media signals sources conveying at least the new first encoding type;
- f) releasing the link message reply signals for transmission to the media signal sources in the reduced group of media signal sources.

15. A method as described in claim 10, wherein said method further comprises:
- a) deriving a set of second encoding types, each second encoding type in said set of encoding types being supported by an associated subset of media signal sources, each subset of media signal sources including at least two media signal sources from the plurality of media signal sources and excluding at least one of the media signal sources from the plurality of media signal sources; and
 - b) generating a link message reply signal for transmission to each media signal source of the plurality of media signal sources, the link message reply signals released to each subset of media signal sources conveying the first encoding type and the second encoding type supported by the subset of media signal sources, the link message reply signals for transmission to the media signal sources other than

the media signal sources in the subsets of media signal sources conveying at least the first encoding type.

16. A method as described in claim 10, wherein said method comprises:

- 5 a) deriving a set of second encoding types supported by at least two media signal sources from the plurality of media signal sources and unsupported by at least one of the media signal sources from the plurality of media signal sources;
- 10 b) processing the set of second encoding types derived in a) to select at least one second encoding type on the basis of performance characteristics associated with the second encoding types in the set of second encoding types;
- 15 c) generating a link message reply signal for transmission to each media signal source of the plurality of media signal sources, the link message reply signals for transmission to the at least two media signal sources supporting the second encoding type selected in b) conveying the first encoding type and the second encoding type selected in b), the link message reply signals for transmission to the media signal sources other than the at least two media signals sources conveying at least the first encoding type.

17. A method as described in claim 10, wherein said method comprises:

- 20 a) deriving a set of first encoding types supported by each media signal source of the plurality of media signal sources;
- 25 b) generating a link message reply signal for transmission to each media signal source of the plurality of media signal sources, the link message reply signals for transmission to the at least two media signal sources supporting the second encoding type conveying the set of first encoding types and the second encoding type, the link message reply signals for transmission to the media signal sources other than the at least two media signals sources conveying at least the set of first encoding types .

30 18. A method as described in claim 10, wherein said method comprises:

- a) deriving a set of first encoding types supported by each media signal source of the plurality of media signal sources;
- b) processing the set of first encoding types derived in a) to select at least one encoding type on the basis of performance characteristics associated with the encoding types in the set of first encoding types;
- c) generating a link message reply signal for transmission to each media signal source of the plurality of media signal sources, the link message reply signals for transmission to the at least two media signal sources supporting the second encoding type conveying the at least one first encoding type selected in b) and the second encoding type, the link message reply signals for transmission to the media signal sources other than the at least two media signals sources conveying the at least one first encoding type selected in b).

19. A computer readable medium including a program element suitable for execution by a computing apparatus for managing a conference between a plurality of media signal sources generating media data packets conveying encoded media information and encoding type information, said computing apparatus comprising:

- a) a memory;
- b) a processor operatively connected to said memory unit, said program element when executing on said processor being operative for:
 - i. receiving a plurality of link messages for joining a conference, each link message being associated with a respective media signal source of the plurality of media signal sources, each link message including a data element from which can be derived at least one encoding type that the associated media signal source can support during decoding of encoded media information;
 - ii. processing the data elements in the plurality of link messages to derive:
 - (a) a first encoding type supported by each media signal source of the plurality of media signal sources;
 - (b) a second encoding type different from the first encoding type supported by at least two media signal sources from the plurality of media signal sources

and unsupported by at least one of the media signal sources from the plurality of media signal sources;

- 5 iii. generating a link message reply signal for transmission to each media signal source of the plurality of media signal sources, the link message reply signals for transmission to the at least two media signal sources supporting the second encoding type conveying the first encoding type and the second encoding type, the link message reply signals for transmission to the media signal sources other than the at least two media signals sources conveying at least the first encoding type;
- 10 iv. releasing the link message reply signals for transmission to the plurality of media signal sources.

15 20. A computer readable storage medium as described in claim 19, wherein said memory element is suitable for storing a plurality of records, each record being associated with a media signal source that is part of the conference, each record declaring at least one encoding type supported by the associated media signal source.

20 21. A computer readable storage medium as defined in claim 10, wherein said program element when executing on said processor is operative for:

- 25 a) generating a record in response to a link message from a media signal source for which no record is present in said memory, the record declaring at least one encoding type that the media signal source associated with the link message supports;
- b) storing the record in said memory.

 22. A computer readable storage medium as described in claim 19, wherein said program element when executing on said processor is operative for:

- 30 a) receiving a link message from a new media signal source subsequent to the deriving of the first and second encoding types;

b) processing the data elements from the plurality of the media signal sources and the new media signal source to derive:

i. a new first encoding type supported by each media signal source of the plurality of the media signal sources and the new media signal source, the plurality of the media signal sources and the new media signal source forming an augmented set of media signal sources;

ii. a new second encoding type different from the new first encoding type supported by at least two media signal sources from the augmented set of media signal sources and unsupported by at least one of the media signal sources from the augmented set of media signal sources;

c) generating a link message reply signal for transmission to each media signal source of the augmented set of media signal sources, the link message reply signals for transmission to the at least two media signal sources from the augmented set of media signal sources supporting the new second encoding type conveying the new first encoding type and the new second encoding type, the link message reply signals for transmission to the media signal sources from the augmented set of media signal sources other than the at least two media signals sources conveying at least the new first encoding type;

d) releasing the link message reply signals for transmission to the media signal sources in the augmented set of media signal sources.

23. A computer readable storage medium as described in claim 20, wherein said program element when executing on said processor is operative for:

a) receiving an exit message for exiting a conference, the exit message being associated with a given media signal source, said exit message being received subsequent to the deriving of the first and second encoding types;

b) processing the exit message to identify in the memory element a record associated with the given media signal source;

c) removing the record associated with the given media signal source identified in b) from the plurality of records in the memory element thereby forming a reduced

group of records, the reduced group of records being associated with a reduced group of media signal sources;

d) processing the reduced group of records in the memory element to derive:

i. a new first encoding type supported by each media signal source of the reduced group of media signal sources;

ii. a new second encoding type different from the new first encoding type supported by at least two media signal sources from the reduced group of media signal sources and unsupported by at least one of the media signal sources from the reduced group of media signal sources;

e) generating a link message reply signal for transmission to each media signal source of the reduced group of media signal sources, the link message reply signals for transmission to the at least two media signal sources from the reduced group of media signal sources supporting the new second encoding type conveying the new first encoding type and the new second encoding type, the link message reply signals for transmission to the media signal sources from the reduced group of media signal sources other than the at least two media signals sources conveying at least the new first encoding type;

f) releasing the link message reply signals for transmission to the media signal sources in the reduced group of media signal sources.

24. A computer readable storage medium as described in claim 19, wherein said program element when executing on said processor is operative for:

a) deriving a set of second encoding types, each second encoding type in said set of encoding types being supported by an associated subset of media signal sources, each subset of media signal sources including at least two media signal sources from the plurality of media signal sources and excluding at least one of the media signal sources from the plurality of media signal sources; and

b) generating a link message reply signal for transmission to each media signal source of the plurality of media signal sources, the link message reply signals released to each subset of media signal sources conveying the first encoding type and the second encoding type supported by the subset of media signal sources, the

link message reply signals for transmission to the media signal sources other than the media signal sources in the subsets of media signal sources conveying at least the first encoding type.

5 25. A computer readable storage medium as described in claim 19, wherein said program element when executing on said processor is operative for:

a) deriving a set of second encoding types supported by at least two media signal sources from the plurality of media signal sources and unsupported by at least one of the media signal sources from the plurality of media signal sources;

10 b) processing the set of second encoding types derived in a) to select at least one second encoding type on the basis of performance characteristics associated with the second encoding types in the set of second encoding types;

15 c) generating a link message reply signal for transmission to each media signal source of the plurality of media signal sources, the link message reply signals for transmission to the at least two media signal sources supporting the second encoding type selected in b) conveying the first encoding type and the second encoding type selected in b), the link message reply signals for transmission to the media signal sources other than the at least two media signals sources conveying at least the first encoding type.

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26. A computer readable storage medium as described in claim 19, wherein said program element when executing on said processor is operative for:

a) deriving a set of first encoding types supported by each media signal source of the plurality of media signal sources;

25 b) generating a link message reply signal for transmission to each media signal source of the plurality of media signal sources, the link message reply signals for transmission to the at least two media signal sources supporting the second encoding type conveying the set of first encoding types and the second encoding type, the link message reply signals for transmission to the media signal sources other than the at least two media signals sources conveying at least the set of first encoding types .

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27. A computer readable storage medium as described in claim 19, wherein said program element when executing on said processor is operative for:

- 5 a) deriving a set of first encoding types supported by each media signal source of the plurality of media signal sources;
- b) processing the set of first encoding types derived in a) to select at least one encoding type on the basis of performance characteristics associated with the encoding types in the set of first encoding types;
- 10 c) generating a link message reply signal for transmission to each media signal source of the plurality of media signal sources, the link message reply signals for transmission to the at least two media signal sources supporting the second encoding type conveying the at least one first encoding type selected in b) and the second encoding type, the link message reply signals for transmission to the media signal sources other than the at least two media signals sources conveying the at
15 least one first encoding type selected in b).

28. A media signal source suitable for generating media data packets conveying encoded media information and encoding type information, said media signal source supporting a plurality of encoding types, said media signal source including:

- 20 a) a processing unit operative for generating a link message indicative of a desire of joining a given conference, the link message including a data element from which can be derived the plurality of encoding types that said media signal source can support;
- b) an output unit suitable for releasing the link message for transmission to a
25 conference bridge;
- c) an input suitable for receiving a link message reply signal from the conference bridge, the link message reply signal conveying a set of selected encoding types, the set of selected encoding types including at least one encoding type;
- 30 d) said processing unit being operative for processing the link message reply signal to render active a subset of encoding types in the plurality of encoding types supported by said media signal source on the basis of the set of selected encoding

types conveyed by the link message reply signal, thereby causing media data packets generated by the media signal source to include encoded media information encoded using at least one encoding type of the subset of encoding types.

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29. A media signal source as defined in claim 28, wherein each encoding type in the set of encoding type in said link message reply signal is supported by said media signal source.

10 30. A media signal source as defined in claim 29, wherein the set of selected encoding types in said link message reply signal includes:

- 15 a) a first encoding type supported by each media signal source that is part of the conference;
- b) a second encoding type supported by at least two media signal sources that are part of the conference, said second encoding type being unsupported by at least one media signal source that is part of the conference;
- 20 c) the processing unit being operative for processing the link message reply signal to render active at least the first encoding type in the set of selected encoding types, thereby causing media data packets generated by the media signal source to include encoded media information encoded on the basis of at least the first encoding type.

25 31. A media signal source as defined in claim 30, wherein said processing unit is operative for processing the link message reply signal to render active the second encoding type in said media signal source, thereby causing media data packets generated by the media signal source to include encoded media information and encoding type information derived using said first encoding type and encoded media information and encoding type information derived using said second encoding type.

30 32. A media signal source as described in claim 28, wherein the media signal source is part of a terminal unit.

33. A media signal source as described in claim 28, wherein the media signal source is part of a gateway.

5 34. A method for managing a conference at a media signal source, the media signal source being operative for generating media data packets conveying encoded media information and encoding type information, the media signal source supporting a plurality of encoding types, said method comprising:

10 a) generating a link message indicative of a desire of joining a given conference, the link message including a data element from which can be derived the plurality of encoding types that said media signal source can support;

b) releasing the link message for transmission to a conference bridge;

15 c) receiving a link message reply signal from the conference bridge, the link message reply signal conveying a set of selected encoding types, the set of selected encoding types including at least one encoding type;

20 d) processing the link message reply signal to render active a subset of encoding types in the plurality of encoding types supported by the media signal source on the basis of the set of selected encoding types conveyed by the link message reply signal, thereby causing the media signal source to generate media data packets conveying encoded media information and encoding type information using the subset of encoding types of said set of selected encoding types conveyed by the link message reply signal.

25 35. A method as defined in claim 34, wherein each encoding type in the set of encoding type in the link message reply signal is supported by the media signal source.

36. A media signal source as defined in claim 34, wherein the set of selected encoding types in the link message reply signal includes:

30 a) a first encoding type supported by each media signal source that is part of the conference;

- b) a second encoding type supported by at least two media source part of the conference, said second encoding type being unsupported by at least another media signal source that is part of the conference;
- c) said method comprising processing the link message reply signal to render active at least the first encoding type in the set of selected encoding types, thereby causing the media signal source to generate media data packets conveying encoded media information and encoding type information using at least said first encoding type.

37. A method as defined in claim 36, said method comprising processing the link message reply signal to render active the second encoding type in said media signal source, thereby causing said media signal source to generate media data packets conveying encoded media information and encoding type information using said first encoding type and said second encoding type.

38. A media conferencing system comprising:

- a) a plurality of media signal sources, each media signal source being suitable for generating media data packets conveying encoded media information and encoding type information, each media signal source supporting a respective set of encoding types, said media signal source including:
 - i. a processing unit operative for generating a link message indicative of a desire of joining a given conference, the link message including a data element from which can be derived the plurality of encoding types that said media signal source can support;
 - ii. an output unit suitable for releasing the link message for transmission to a conference bridge;
 - iii. an input suitable for receiving a link message reply signal from a conference bridge, the link message reply signal conveying a set of selected encoding types, the set of selected encoding types including at least one encoding type;

- iv. said processing unit being operative for processing the link message reply signal to render active a subset of encoding types in the plurality of encoding types supported by said media signal source on the basis of the set of selected encoding types conveyed by the link message reply signal, thereby causing said media signal source to generate media data packets conveying encoded media information and encoding type information using the subset of encoding types of said set of selected encoding types conveyed by the link message reply signal;
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- b) a conference bridge suitable for interconnecting said plurality of media signal sources, said conference bridge comprising:
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- i. an input for receiving a plurality of link messages for joining a conference, each link message being associated with a respective media signal source of the plurality of media signal sources, each link message including a data element from which can be derived at least one encoding type that the associated media signal source can support during decoding of encoded media information;
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- ii. a processing unit coupled to said input, said processing unit being operative for:
- (a) processing the data elements in the plurality of link messages to derive:
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- (i) a first encoding type supported by each media signal source of the plurality of media signal sources;
- (ii) a second encoding type different from the first encoding type supported by at least two media signal sources from the plurality of media signal sources and unsupported by at least one of the media signal sources from the plurality of media signal sources;
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- (b) generating a link message reply signal for transmission to each media signal source of the plurality of media signal sources, the link message reply signals for transmission to the at least two media signal sources supporting the second encoding type conveying the first encoding type and the second encoding type, the link message reply signals for transmission
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to the media signal sources other than the at least two media signals sources conveying at least the first encoding type;

- iii. an output coupled to said processing unit for releasing the link message reply signals for transmission to the plurality of media signal sources.

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39. A conference bridge for managing a conference between a plurality of media signal sources generating media data packets conveying encoded media information and encoding type information, said conference bridge comprising:

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- a) a memory element suitable for storing a plurality of records, each record being associated with a media signal source part of the conference, each record declaring at least one encoding type supported by the associated media signal source;

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- b) an input for receiving media data packets from the plurality media signal sources, each media data packet including:
 - i. a content portion indicative of encoded media information;
 - ii. an encoding type portion declaring at least one encoding type associated with the content portion of the media data packet;

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- c) a processing unit coupled to said input and to said memory unit, said processing unit being operative for:
 - i. processing the media data packets received at said input to select at least one active media signal sources within the conference on the basis of the content portions of the media data packets, the at least one active media signal source having transmitted at least one given media data packet;

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- d) an output for releasing the given media data packet for transmission to at least some media signal sources in the plurality of media signal sources.

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40. A conference as described in claim 39, said processing unit being operative for processing the at least one given media data packet associated with the at least one active media signal source to select a subset of media signal sources within the conference at least in part on the basis of the encoding type portion of the at least one given media data packet and the plurality of records in said memory unit, each media

signal source in the subset of media signal sources supporting an encoding type declared in the encoding type portion of the at least one given media data packet, said output being operative for releasing the given media data packet for transmission to media signal sources in the subset of media signal sources.

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41. A method for managing a conference between a plurality of media signal sources generating media data packets conveying encoded media information and encoding type information, said method comprising:

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a) providing a memory element suitable for storing a plurality of records, each record being associated with a media signal source part of a conference, each record declaring at least one encoding type supported by the associated media signal source;

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b) receiving media data packets from the plurality media signal sources, each media data packet including:
i. a content portion indicative of encoded media information;
ii. an encoding type portion declaring at least one encoding type associated with the content portion of the media data packet;

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c) processing the media data packets received in b) to select at least one active media signal source within the conference on the basis of the content portions of the media data packets, the at least one active media signal source having transmitted at least one given media data packet;

d) releasing the given media data packet for transmission to at least some media signal sources in the plurality of media signal sources.

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42. A method as defined in claim 41, said method comprising:

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a) processing the at least one given media data packet associated with the at least one active media signal source to select a subset of media signal sources within the conference at least in part on the basis of the encoding type portion of the at least one given media data packet and the plurality of records in said memory unit, each media signal source in the subset of media signal sources supporting an encoding

type declared in the encoding type portion of the at least one given media data packet;

- b) releasing the given media data packet for transmission to media signal sources in the subset of media signal sources.

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43. A computer readable medium including a program element suitable for execution by a computing apparatus for managing a conference between a plurality of media signal sources generating media data packets conveying encoded media information and encoding type information, said computing apparatus comprising:

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- a) a memory element suitable for storing a plurality of records, each record being associated with a media signal source part of a conference, each record declaring at least one encoding type supported by the associated media signal source;;

- b) a processor operatively connected to said memory unit, said program element when executing on said processor being operative for:

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- i. receiving media data packets from the plurality media signal sources, each media data packet including:

- (a) a content portion indicative of encoded media information;

- (b) an encoding type portion declaring at least one encoding type associated with the content portion of the media data packet;

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- ii. processing the media data packets received in i. to select at least one active media signal source within the conference on the basis of the content portions of the media data packets, the at least one active media signal source having transmitted at least one given media data packet;

- iii. releasing the given media data packet for transmission to at least some media signal sources in the plurality of media signal sources.

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44. A computer readable medium as described in claim 43, wherein said program element when executing on said processor being operative for:

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- a) processing the at least one given media data packet associated with the at least one active media signal source to select a subset of media signal sources within the conference at least in part on the basis of the encoding type portion of the at least

one given media data packet and the plurality of records in said memory unit, each media signal source in the subset of media signal sources supporting an encoding type declared in the encoding type portion of the at least one given media data packet;

- 5 b) releasing the given media data packet for transmission to media signal sources in the subset of media signal sources.

45. A conference bridge suitable for managing a conference between a plurality of media signal sources generating media data packets conveying encoded media information and encoding type information, said conference bridge comprising:

- 10 a) means for receiving a plurality of link messages for joining a conference, each link message being associated with a respective media signal source of the plurality of media signal sources, each link message including a data element from which can be derived at least one encoding type that the associated media signal source can support during decoding of encoded media information;

- 15 b) means for processing the data elements in the plurality of link messages to derive:
- (a) a first encoding type supported by each media signal source of the plurality of media signal sources;
 - (b) a second encoding type different from the first encoding type supported by at least two media signal sources from the plurality of media signal sources and unsupported by at least one of the media signal sources from the plurality of media signal sources;

- 20 c) means for generating a link message reply signal for transmission to each media signal source of the plurality of media signal sources, the link message reply signals for transmission to the at least two media signal sources supporting the second encoding type conveying the first encoding type and the second encoding type, the link message reply signals for transmission to the media signal sources other than the at least two media signals sources conveying at least the first encoding type;

- 25 d) means for releasing the link message reply signals for transmission to the plurality of media signal sources.
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46. A data structure for storing a media data packet suitable for conveying encoded media information and encoding type information, said data structure comprising:
- a) a first encoding type portion declaring at least one encoding type ;
 - 5 b) a first content portion indicative of media information encoded with the encoding type in the first encoding type portion;
 - c) a second encoding type portion declaring at least one encoding type ;
 - d) a second content portion indicative of media information encoded with the encoding type in the second encoding type portion, the media information in the first content portion and the second content portion being derive from a common media signal.
47. A media signal source suitable for generating media data packets conveying encoded media information and encoding type information, said media signal source supporting a plurality of encoding types, said media signal source including:
- 15 a) means for generating a link message indicative of a desire of joining a given conference, the link message including a data element from which can be derived the plurality of encoding types that said media signal source can support;
 - b) means for releasing the link message for transmission to a conference bridge;
 - 20 c) means for receiving a link message reply signal from the conference bridge, the link message reply signal conveying a set of selected encoding types, the set of selected encoding types including at least one encoding type;
 - d) means for processing the link message reply signal to render active a subset of encoding types in the plurality of encoding types supported by said media signal source on the basis of the set of selected encoding types conveyed by the link message reply signal, thereby causing said media signal source to generate media data packets conveying encoded media information and encoding type information using the subset of encoding types of said set of selected encoding types conveyed by the link message reply signal.

48. A media signal source suitable for generating media data packets conveying encoded media information and encoding type information, said media signal source being suitable for use in a conferencing system including a conference bridge and a plurality of other media signal sources, said media signal source including:

- 5 a) a first input for receiving a plurality of successive segments of a media data signal;
 - b) a second input suitable for receiving a plurality of media data packets from the conference bridge;
 - 10 c) a processing unit coupled to said first input and said second input, said processing unit being operative for:
 - i. generating a plurality of successive media data packets on the basis plurality of said plurality successive segments of a media data signal;
 - 15 ii. processing the plurality of successive media data packets generated in i. on the basis of the plurality of media data packets received at said second input to identify at least one media data packet in said plurality of successive media data packets unlikely to be retransmitted by said conference bridge;
- an output for releasing to the conference bridge the plurality of successive media data packets except the at least one media data packet identifies as being unlikely to be retransmitted by said conference bridge.